Examiner's Report/ Principal Examiner Feedback

Summer 2016

GCE Music Technology (6MT01)

The overall impression is that the broad pattern of submissions witnessed over the last few years has been maintained this year. The quality of submissions for task 1A was generally very impressive, and multi-track recordings were again mostly completed to a high standard. Task 1C provided the greatest variation in marks and was, in general, not completed to quite as high a standard as the other two tasks.

The logs show that centres are continuing to make appropriate equipment choices, (a trend that has been apparent over the last few years). This is giving candidates an excellent chance of successful coursework completion.

There were very few examples of candidates failing to meet the criteria of the specification. Whilst many candidates are recognising the importance of questions 9 and 10 in the logbook, there are still significant numbers who put limited time and effort into completing these questions - the marks scored here can have a very significant impact upon the overall grade awarded.

Sequenced Realised Performance

This year's stimulus was *"Rather Be"* by Clean Bandit, featuring Jess Glynn. As has been the case in previous years, candidates are tending to approach this task in one of three ways; those who enter data incorrectly, those who enter it accurately but with a mechanical result, and those who produce a musical performance with editing, shaping and attention to detail.

The majority of candidates pursued this task successfully, with many having clearly referenced both the skeleton score and the original recording to complete their sequence. It was clear that some candidates had also listened to the stem recordings that could be located on the internet. However, the stems were not necessarily always faithful to the full mix, and some candidates lost marks by only using the stems files and not referring back to the final mix.

There were also a number of videos posted on the internet giving step by step instructions on how to sequence the track. Candidates should treat such resources very carefully as some of these videos contained information that was wholly inaccurate and suggested students approach certain parts of the task in ways that were wholly inappropriate – one of the main issues being where candidates were shown how to use the original stem vocal linked to a vocoder. Several candidates then submitted their task with the original vocal clearly audible in the mix and this adversely affected their mark. It should be noted that any use of any part of the original track in any form is not allowed. Videos also attempted to help candidates programme the correct timbres, often with very variable accuracy. Such videos can be posted by anybody and as such, should be treated with great caution as they are no guarantee of success. Teachers should be aware that such 'help' is always going to be posted online, but should advise pupils to treat such resources with great caution.

Pitch and rhythm

The pitch/rhythm data entry was generally accurate. It was uncommon to find significant errors in pitch and/or rhythm in submissions and quite common to hear work that showed candidates had been listening closely to replicate the full arrangement of parts. Most candidates successfully inputted the given skeleton score whilst many showed evidence of close study of the original recording through the programming of additional parts that had been omitted from the score. Whilst several parts could be replicated through 'copy and paste', there were also parts, most notably the drum parts, that evolved throughout the track, and the best candidates created a really authentic and dynamic groove by developing the rhythm parts throughout. The rhythm of the piano part also changed in some repeat sections and many candidates simply copied and pasted the chords.

The majority of candidates added the violin and cello solo lines from bar 64-70

The most common errors were

- Completely missing the left hand of the string/synth parts
- Not adding the extra percussion part from bar 25
- Missing ad lib vocals in bar 46 and 70-71
- Not adding string part from bar 41-47
- Missing some of the drum drops and fills, some of which were scored, some of which were not.
- Repeating the bass pattern from bar 25 at bar 65
- Missing backing vocals, including the 'oohs from bar 65.

Timbre

Many examiners again noted the continued trend towards more successful timbre choice and editing. In most cases, candidates' work showed good evidence of accurate listening and analysis to select correct instrumental timbres. Many candidates had made some attempt to alter the envelopes of the sounds. Quite often, however, there was insufficient editing of sounds to match the characteristics of the original instrumentation. The use and application of reverb was crucial to the success of the track, and the musical use of effects is one area that teachers may wish to focus on in future.

There are still a number of candidates who rely too heavily upon presets, whilst some of the editing undertaken was not entirely successful, with a consequent impact on the success of the mix.

The vocal timbre was generally well selected with less candidates choosing non-sustaining timbres (e.g. piano). However, care needs to be taken to create some contrast between the different vocal parts. Many candidates struggled to select/shape an appropriate bass timbre – often such complex timbres benefit from layering up more than one timbre.

Balance/Pan

As in previous years, candidates who omitted timbres, for example, by missing out a part, failed to access the full marks for this criterion. Most candidates, however, demonstrated good awareness of appropriate balancing. This is one area where close and continual reference to the original recording is particularly important, since even slight alterations to timbre or arrangement by candidates can impact the effectiveness of their overall balance, at any stage.

The violin and cello solo parts from bar 64-70 were the main areas where some obvious panning was used in the original mix, and surprisingly few candidates attempted to pan these parts.

Musicality

Most candidates attempted to recreate some of the dynamic features in the original recording. The track builds steadily section by section to a dynamic climax at bar 41 followed by a noticeable drop in bar 49, then building up to the second chorus in 81. Whilst this is as much textural as dynamic, the most successful candidates created this sense of build and drop of the dynamics in a creative and musical way. The snare fill in bars 40 and 80 had some careful dynamic shaping and many candidates successfully replicated this.

Failure to input all the instrumental parts often had a negative impact upon the dynamics as many of the shifts were due to textural changes.

The articulation and phrasing remains a challenge to many candidates, although increasing numbers of candidates are attempting to shape the MIDI data more. The majority scored 'inconsistent' as there was insufficient attention given to shaping the vocal part through *subtle* use of note lengths, pitch bends and modulation. Where changes were made, they varied in the degree to which they were successful. Some candidates took great care to replicate the subtle nuances of the vocal line, whilst others took a more generalised approach to pitch bend and modulation, which often led to erratic outcomes. Such details are crucial in successfully realising the vocal part. Some candidates chose vocal timbres that had a degree of portamento build in. Whilst this can create a relatively pleasing effect, it does not represent a great deal of work by a candidate to replicate the phrasing of the vocalist.

There were also opportunities for candidates to shape the string and synth parts, which were generally done very successfully, as well as the bass line, which was less successful.

Style/Music technology skills

Rather Be had a number of added elements which helped create the overall sense of style. The delay on the vocal was a key characteristic on certain phrases throughout the track. There were several reverse cymbal samples, and a descending sine sweep (eg bar 43/44). Candidates who attempted these did so with varying degrees of success. However, high scoring submissions had included these features successfully and had also creqated a really good sense of groove that drives the track at different times by creatively programming the drums and avoiding an overly mechanical approach.

The success in handling the end of the sequence was mostly excellent, although some candidates continued beyond bar 89 and sequenced the whole song. Any material beyond bar 89 was not assessed.

The final masters continue to be of a good or excellent standard. Less candidates are chopping either the start or the end of the track (in all 3 tasks). However, there are still some candidates who are needlessly losing marks through a careless error that is easily avoided. Again, less candidates had long lead outs (more than 5 seconds) this year than previously heard.

Candidates are again reminded to study the mark scheme for this part of the task, as there is a reference to chopped beginnings and endings, often ignored. Work should always be checked to ensure that the lead-in and lead-out is not excessive (no more than 5 seconds) and that details such as a reverb tail or the decay of a synth pad are not cut off.

Multi-track Recording

This task was generally completed to a high standard. However, some candidates still do not consider the potential practical challenges that can be invoked or avoided by their particular choice of stimulus. Generally, the more successful submissions had clearly selected a piece and arrangement suited to the given recording environment, resources and musicians. In these instances, candidates usually had less corrective work to achieve at the processing stage.

Some candidates are still choosing pieces that are beyond the demands of the specification (both in terms of track count and complexity). Whilst there are examples of outstanding work in these cases, more often than not such material proves to be beyond the level of skill demonstrated by most AS Level candidates.

There were still some examples this year of candidates adopting questionable means with which to meet the task requirements in terms of track and microphone count. Such an approach does not benefit the candidate as, at best, it does not give sufficient scope for candidates to demonstrate their skill level and, at worst, it can lead to a loss of marks. Centres should again note that the following actions will almost certainly lead to a loss of marks:

- recording tracks with an inappropriate number of microphones (e.g. two mics on a bass amp)

- recording only the drum track and bass part of the song whilst still meeting the required number of mics/tracks (thus submitting a song that is regarded as 'incomplete' according to the mark scheme)

- Using the studio software to copy a previously recorded track onto a second track. This does not count as an extra track.

It is not uncommon for candidates to make up the track count by adding in untuned percussion tracks – shakers, tambourines, cajons etc. These tracks are invariably recorded and mixed extremely poorly and almost without exception, result in a candidate losing marks. Successfully capturing an instrument with such a low dynamic as an egg shaker and then incorporating it meaningfully into a mix is incredibly difficult. Candidates MUST be dissuaded from adopting this approach to make up their track count (or, for that matter, add in as a detail to a submission that has already met the track count). A final word on candidates who submit recordings that use a cajon. Whilst these instruments are very popular, they are also not easy to play successfully, or record. It is also very probable that the majority of cajons that are recorded in schools are cheap, low end instruments. Almost without exception, candidates who submitted recordings that incorporated a cajon did not score as highly as they could have. If your candidates insist on a percussion part, they would be far better served being taught how to mike up a kick drum and a snare and recording on two separate tracks – there is no need for a full kit and this would give candidates a good basic introduction to recording drums and produce something of a far better quality.

The most successful centres continue to be those that keep things fairly simple; vocals, guitars, percussion, DI keyboards are typical examples of instruments that are largely well recorded.

Capture

As in previous years, this was generally the most successfully achieved aspect of the recordings. The majority of submissions demonstrated that candidates had selected

appropriate microphones and positioned them competently. Most centres now seem very aware of the requirements of this task across the mark scheme and, whilst lots of centres do not have access to purpose built recording studios, the use of screens and acoustic panelling is making a very significant difference in many cases. Many candidates still struggle to achieve a consistently detailed focus across all parts, whilst room ambience continues to be an issue in some recordings. Correct positioning of microphones is crucial to overcoming such problems.

Candidates do struggle sometimes to achieve clear focus on "additional" parts in their arrangements. Percussion parts and backing vocals can often sound like an "afterthought" - recorded to make up the track count. Candidates need to ensure that all parts are carefully thought out in terms of their capture and positioning in the mix.

This year, an even greater number of recordings demonstrated effective noise elimination. However, background noise could clearly be heard on a few recordings (mainly at the start and end of the track). Such noise needs to be edited out (where possible) and a re-recording made where not.

Candidates should take the time to listen to their finished CD to ensure that the start/end of the track is not chopped and that there is not a gap of >5 seconds at the start or end.

Processing

This criterion continues to be the section which differentiates a lot of submissions. As seen in previous years, many candidates did not gain credit due to lack of attention or inconsistent application of effects and processes. The most successful candidates were usually those who had selected appropriate material and scored highly in criterion 1. In these instances, candidates usually had less corrective work to achieve at the processing stage. This point cannot be overemphasised enough - time taken to carefully select an appropriate track before recording will have a very significant impact upon the processing. Candidates should be encouraged to consider what instrumentalists/vocalists they have available in order to successfully record a particular track. They should reminded that this task is a chance to demonstrate clear, basic recording technique, rather than an opportunity to simply record a "favourite song".

In terms of EQ, as in previous years, common issues ranged from muddy mixes and booming bass guitars to very harsh electric guitars and dull drum tracks. In many cases it was clear that no EQ had been used when the track would have clearly benefitted from some.

Dynamic processing was handled with varying degrees of success (the choice of song again played a crucial role here). Many candidates struggled to get the lead vocal to "sit" in the mix, whilst kick drums and bass guitars were often lacking in sufficient control.

FX were reasonably well handled. Most mixes showed some attempt to use reverb although its application was often inconsistent. Instruments occupying very different spaces was, again a common observation made by examiners. Delay is also being increasingly well utilised and there were examples of very effective guitar FX. There are still some candidates choosing to use no reverb at all in a misguided attempt to create a "dry" contemporary mix.

Balance and blend

Many candidates attained an appropriate sense of balance (particularly if the stimulus material chosen was appropriate). However, it was still common for particular instruments to be over-favoured in the mix (often electric guitars, vocal or drums). The blending of instruments was more varied with many candidates struggling to fully achieve this aspect. In particular, candidates offering submissions containing a large number of

DI'd instruments often failed to successfully blend these with the tracks captured via microphones.

In terms of stereo, most candidates attempted to establish an effective stereo field (although there were still a number of mono submissions). Many candidates panned the drum overheads (sometimes to an extreme), but greater care needs to be taken over panning other elements of the mix. Many mixes "pulled" to one side due to inconsistencies in this area. It is still quite common for mixes to feature noticeable imbalances between parts or extreme/irregular arrangements in panning. Centres should encourage students, as far as possible, to review their mixes on a set of adequate monitoring speakers as well as headphones and always keep in mind contemporary conventions in the use of stereo field.

Creative Sequenced Arrangement

This year, the most popular style was electro-pop (approx. 80%). Both stimulus songs were popular, with slightly more candidates choosing 'Smells Like Teen Spirit' over 'Happy'

There were examples of outstanding work across both styles with high scoring candidates demonstrating a secure and idiomatic understanding of their chosen style. There were a number of arrangements that showed extensive and convincing development of both stimulus tracks.

However, this task was often completed less convincingly than the other two. There was a tendency for submissions to be extremely formulaic with a fairly unimaginative approach. Electro-pop arrangements often veered too far toward a dance genre with a far too repetitive approach. Rock and Roll arrangements often attempted to capture the basic elements of the genre but without any sense of flow or groove stemming from a very overly mechanical approach.

Use of stimulus

This is often one of the most disappointing aspects of submissions. Many candidates did little to change or develop the original melody or harmony, and quite often the structure resulting in what sounded like a backing track in a slightly different style. On the other extreme, there were a number of candidates who submitted arrangements from which it was almost impossible to tell what song had been used as a stimulus.

One of the biggest challenges in producing a successful electro-pop arrangement was that of developing the stimulus whilst maintain the sense of a pop song, and the highest scoring candidates managed to achieve this.

Many candidates who attempted a rock and roll arrangement reharmonised using a 12 bar blue. This had the possibility of working very well and some candidates produced extremely high quality work. Many, however, tended to use a couple of lines of melody lifted directly from the stimulus before launching into a 12 bar blue rock track which was a thinly disguised version of any one of a number of existing rock and roll songs, an approach which lacked both coherence and development. There were some wonderful examples of improvised blues solos built around the stimulus material.

Style/Coherence

It is really important that candidates spend time researching the style carefully and understanding the detail that goes in to all successful tracks. The most successful candidates had clearly done this (and backed it up with evidence in the log book), and produced interesting and coherent arrangements. As in previous years, many candidates used cut and paste far too much and produced tracks that were simply too repetitive. A minority of candidates seemed to think that they were at liberty to change the stimulus style to their liking, and referred to the electro-pop style as 'electro-dance' or 'electro-house' in their logs, producing tracks that scored high on music technology but very low on style.

Use of Music Technology

Confidence, control and creativity with use of music technology continues to be increasing, with many students demonstrating a clear understanding of the technical requirements of the two styles.
Many candidates showed clear listening and understanding of very contemporary approaches to house music production, underlining the relevance of the qualification. There were some stunning tracks submitted in both genres, where all the parameters in this area of the mark scheme (timbre, balance, stereo field, dynamics, articulation and phrasing) had been meticulously considered. Some students still struggle to understand the importance of the final mix process within this task and lose marks through carelessness – for example, not balancing the track or taking opportunities to add musical dynamics and articulation.

As in previous years, in both genres some candidates appeared not to have checked their final recordings for obvious errors, such as cuts/lead outs, which could have been easily rectified.

Melody

The use of melody is one that many candidates struggle with. The more basic arrangements tend to simply replicate the given stimulus melody with very limited development or variation. Credit in this category is given to any musical development of the original stimulus as well as any additional melodic material composed by the candidate. This can be anything from interesting/idiomatic bass lines (for example walking basses in rock and roll) to new melodies and short riffs. An imaginative approach to melody, especially in the electro pop genre was often also linked to a well-constructed, layered texture that is typical of that genre.

Harmony

The development of harmony remains an area in which a very significant number of candidates again did not score higher than “3”. Many candidates simply completed the given chords without any successful development/new additions leading to a “functional” harmony. A few candidates changed the chords to ones which did not fit with the melody, leading to uncomfortable passages. In house, the harmony was often taken directly from the stimulus with very little alteration. Where the harmony was developed the outcome was often successful. Candidates need to think carefully about how they can extend the given harmonic material.

Rhythm

This aspect is, once again, an area where a large number of candidates scored well, although there was less extensive development in some submissions. Too many candidates tend to rely on pre-existing loops rather than developing their own which often led to arrangements where the rhythms were stylistically apt, but overly repetitive. Higher scoring candidates showed considerable rhythmic development in their work as loops were edited and new rhythmic motifs added as the piece progressed. Some candidates successfully incorporated some of the very distinct rhythmic features from the stimulus songs, especially from Teen Spirit. Some of the weaker candidates who submitted an electro-pop arrangement of Happy found it hard to move away from the style and features of the original song.

Texture and Instrumentation

There was some good work from many candidates in both genres to produce appropriate textures. The main issue with many candidates was a lack of textural development both within and between sections of arrangements. In electro-pop arrangements, the higher scoring candidates were clearly aware of the need for a layered approach to texture as well as subtle changes and development, with a build up to a hook-based chorus. Most candidates who submitted an electro-pop arrangement chose appropriate timbres, but many did not then use them imaginatively. Most candidates who submitted a rock and roll arrangement were able to produce an appropriate texture. Choice of instruments was variable, with many 'out of the box' instruments sounding extremely artificial and mechanical without some careful editing.

However, as witnessed in previous years, most candidates' submissions did not fully develop the texture to reach the top mark box. There was too much repetition in many arrangements. Higher scoring candidates created idiomatic textures that maintained interest throughout the piece.

Form/structure

Most submissions remain at least functional in this aspect with some sense of direction. A significant number of submissions simply followed the stimulus, whilst others were excessively repetitive. In electro-pop, candidates were expected to produce a song-based structure with a clear build-up to a hook based chorus, and many candidates did this. Some suffered by producing a dance rather than a pop track in structure with extended drops and breaks and reliance on riff rather than tune based melodies. Most rock and roll submissions submitted appropriate structures, although often overly repetitive. Higher scoring candidates produced appropriate, but creative structures that built on, but also extended the structure of their chosen stimulus. Candidates need to think about how to bring appropriate structural variety to their arrangements, creating contrast between the different sections.

Logbooks

Many examiners commented on continued improvement in this aspect of the unit (particularly in Questions 9 and 10). However, the logbooks do continue to vary in quality considerably.

Questions 1-8

Some submissions included photographs of mic set-ups and screen shots, whilst others gave very little information and contained several blank pages. Where included, photographs of mic positioning proved to be very helpful as they gave an accurate demonstration of the mic setup used. Questions 1-8 are a vital source of information for the examiner who refers to them when marking. If features are not clearly identified they may not receive the full credit they deserve.

Fwere candidates this year included large numbers of additional pages attached to their logbooks for questions 1-8. **This is not helpful and should be discouraged**. Candidates are reminded that questions 1-8 in the logbooks are there to give some information to the examiner; **the space given in the logbook provided for questions 1-8 is sufficient for this to be achieved**. If candidates would like to add a few additional pages because they provide key additional information then they may do so. However, the added benefit of doing so is limited, and including many pages of unannotated screenshots is not at all helpful. A number of candidates had submitted very detailed answers (including large numbers of additional pages of screenshots) for questions 1-8 and then only brief answers for questions 9 and 10. More time spent answering questions 9 and 10 would have significantly increased their chances of gaining further credit.

Questions 9 and 10

The quality of answers for questions 9 and 10 continues to be very varied.
The addition of extra sheets for questions 9 and 10 is to be encouraged. It is very difficult (though not impossible) for a candidate to produce an answer that is "substantial and thorough" in the space provided for these questions. Most candidates who score highly on questions 9 and

10 have continued their answer on an additional sheet(s) of paper. (Please note: any additional sheets must be clearly labelled with the candidate's name and number and question number and a suitable phrase such as *"continued on a separate sheet"* should be written at the bottom of the question page in the logbook to clearly show that the answer has been continued). Some candidates made it very difficult for an examiner to know which question was being answered due to a lack of detail on additional pages.

However, some candidates are still missing out on further credit here. Centres are reminded that questions 9 and 10 worth 20 marks and that the answers can be thoroughly prepared before writing up. Many candidates' submissions failed to score highly in this aspect and it can have a very significant effect on their overall result for Unit 1.

Question 9

This question requires the candidate to explain how the arrangement was developed from the stimulus.
The tendency is still for too many candidates to focus on the development of their style, rather than the stimulus. A number of candidates did not refer to the stimulus in sufficient detail. The more successful responses again provided specific detail (bar/time references, chord/note names, section descriptions) and demonstrated correct use of musical or technical terminology, to indicate clearly their intentions and rationale when developing the stimulus. There were a number of examples again this year of candidates who had written a large amount for question 9, but not focused on how the stimulus has been developed. This reduces the amount of credit that can be awarded. Candidates must focus on the stimulus and how it has been developed in this question.

Question 10
This question requires the candidate to correctly identify the stylistic features of the chosen style *and* explain how these are used in the arrangement.

As in previous years, most students appeared to have conducted some research around their chosen genre, but many still relied on a simplistic or generalised understanding of a few stylistic rudiments. Common shortcomings involved vague generalisations. Candidates need to focus on being as specific as possible when commenting on how they have included key features in their arrangement. It is not sufficient to write "electro-pop uses synths so I have used synths" or "rock and roll has a walking bass so I have used one in my arrangement". Detail is required for full credit including reasons for choice, details of technology used and examples of house/reggae artists and songs that use similar techniques. Bar numbers/time references should also be used where appropriate.
Higher scoring responses demonstrated breadth of listening with reference to specific tracks/artists. They showed a more sophisticated appreciation of the specific subtleties of the genre, linking this understanding clearly to specific features of their own arrangement (often using time or bar references, where useful).

Administration

The overwhelming majority of centres submitted work on time and complete.

A few centres failed to pack the CDs adequately so that they arrived broken, but the number of cases was very low. Candidates should be strongly encouraged to pack their submissions appropriately to avoid damage in transit. In other cases work had not been thoroughly checked before sending to the examiner. A few CDs were blank or contained only data. In such cases, it is vital that centres respond to requests for replacement work from examiners promptly. Whilst it is understood by the examining team that CD errors do occur, all CD's should be checked for playback in a standard CD player (not computer CD drive).

If candidates are wanting to submit additional sheets in their logbook these should be clearly labelled with candidate name, number and centre name/number, put in the booklet in the right place and secured with a treasury tag/staples. However, please refer to the comments in *The Logbooks* section above concerning the use of too many additional sheets.

It is important for centres to retain back-up material. Centres should refer to the *Administrative Support Guide* (formerly *Instructions for the Conduct of the Examinations* document) that is available on the GCE Music Technology website under *Course Materials/ Exam materials / Teaching and learning materials / Administrative.*